



# ISMA-USA NEWSLETTER

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## SPECIAL PROJECT FUND

[James Campbell Quick, Ph.D.](#)

ISMA-USA Chairperson-Elect

We are continuing to solicit contributions for the ISMA-USA Special Fund. The Special Fund will help promising graduate students who join our society by paying their annual dues and journal subscription while they are graduate students, up to four years of graduate school. We are interested in recruiting young and vigorous new talent into our field. Please help support the next generation!

## ISMA-USA'S SECRETARY-TREASURER

[Betty J. McGuigan, M.Ed.](#)

ISMA Website Editor



**Margreta Klassen, Ph.D.**, took office as ISMA-USA's secretary-treasurer January 2001. Besides serving on the ISMA-USA's Board of Directors, she handles membership renewals and the association's finances. We are grateful for her talents to the ISMA-USA branch.



Dr. Klassen is a California licensed psychologist and marital and family therapist. She is presently working for Managed Health Network, the mental health branch of Health Net in Huntington Beach. She is certified in stress management and biofeedback. Her private practice is conducted in Newport Beach, California where she now resides.

She has 15 years of experience in the stress management field. From 1988-1997, she developed and coordinated the stress management program at the Claremont Colleges. She was awarded a diploma in stress management by the American College of Forensic Examiners. She helped develop a certification program for the California Biofeedback Society and is working with ISMA-USA on its certification proposal. Her interest in stress management includes research on student stressors in higher education, relationship stressors, gender differences in stress management, and changes in stress management strategies throughout the life cycle.

**A treasurer's report is available to any ISMA-USA member.  
If you wish to receive a copy, contact [Dr. Margreta Klassen](#).**

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**FROM the CHAIR**

**[Paul J. Rosch, M.D., F.A.C.P.](#)**



Dear ISMA-USA Members:

Just a brief note to thank all of you for your continued support, and particular word of thanks to those of you who made additional contributions beyond the dues or journal subscription into our general or special purpose funding. A warm welcome to others who have recently joined us since increasing membership is our top priority. I would like to encourage all of you to assist in this effort by recommending candidates and would welcome any suggestions as to how we can best achieve this goal. In that regard, another major objective is to promote our presence by establishing a web site that is readily accessible and provides an interactive forum for our members.

At present, most people find out about who we are and what we do by accessing the ISMA home page and clicking on links to organizations. Unfortunately, we are ninth on their list, which is neither very helpful nor flattering.

Some of you may not be aware that our site offers the opportunity to post articles you have written that may be valuable to others, as well as a listing of books and scientific publications by members. I would urge all of you to contribute to this since your input may be useful to other members and also provides an opportunity for us to learn more about your special interests. One of our members, Ana Maria Rossi, has done an outstanding job of creating a web site for the Brazilian branch of ISMA-USA and has also organized conferences in Sao Paulo and Porto Alegre at which Dick Rahe, Jim Quick and I will be participating in. Dr. Kate Partridge from Canada has just joined us, and hopefully she and her colleagues north of the border will be able to attract new members and promote similar activities. We are also continuing to actively explore with Wes Sime and others the possibility of offering a course that would provide certification in stress management that would provide a needed service and additional income.

All of these undertakings require time, expertise, and most importantly, funding, so that we are in somewhat of

a Catch-22 situation. Our primary source of revenue is from membership dues but we can't attract new members without proper promotion and providing services that would be useful for them, all of which incur additional expenses. At present, we are extremely fortunate in that Betty McGuigan, Margreta Klassen and Serena Wadhwa have donated their time and talent to insuring that our organization runs smoothly. This entails seeing that bills are paid and other bookkeeping duties, keeping up with correspondence and membership details, maintaining our present web site, getting out the Newsletter and numerous other demands. We cannot continue to impose on their generosity, and as noted in the announcements, Betty will be surrendering her Internet duties in November. If any of you have some additional time to take some of the load off of these dedicated individuals or have other suggestions, I would love to hear from you, especially if anyone has had experience in setting up and maintaining a web site. Hiring a part time Executive Director who could coordinate all these activities is another option we should seriously consider if our budget can support it. It seems conceivable that as a non-profit organization, we might be eligible for a grant from some governmental agency, foundation, or other philanthropy, and any suggestions on how to pursue this would be especially welcome.

That's a thumbnail sketch of how we stand and where we hope to go. Once again, thanks for your continued support and I look forward to hearing from you.

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**FOCUS on STRESS  
MANAGEMENT**

## **RELAXATION: SENSATIONS IN MUSCLES**

**[Oleg Radyuk, M.D.](#)**

Acknowledgment to Elena Basalaeva for translation from Russian

It is known that in order to master the Progressive Muscle Relaxation technique, beginners must practice certain exercises, and after that they should concentrate on the relaxation sensations, which appears in the muscles tensed during the exercises.

It is very important to learn correct concentration. It is not easy because "relaxation" means lack of tension, and it is not always simple to feel "something missing." Still the sensations that accompany relaxation are quite certain, though different in their expression. Some are more pronounced; others are less intense. These differences make it possible to define the level of relaxation reached. The more evident the sensation experienced, the higher the quality of the relaxation. The most common sensations are heat, pricking, heaviness, lightness and pulsation.

All these sensations are evident, to one extent or another, in all the muscles in a relaxed state, but the most pronounced sensations are registered in the palms. This may be related to areas in the cerebral cortex that correspond to sensations in the hands and fingers in particular. Thus, it is easier to master relaxation if training starts with the palms. Therefore, in the following references to relaxation, we mainly mean palm sensations.

HEAT is the most reliable evidence of relaxation. As a rule, it occurs in the muscles during initial exercises and persists during the course of training. The feeling of warm palms is due to vasodilatation caused by relaxation. Training exercises require muscles get energy from their own resources. Once relaxed, the muscles allow the vessels to dilate and to restore oxygen and nutrients. The greater the diameter of the vessels, the more efficiently the blood flows to the relaxed muscles. It is a fact that the internal body temperature is higher than that on the surface. The difference is rather great; while the internal temperature never goes under 37 degrees centigrade, the fingers normally do not manifest temperature more than 30-32 degrees centigrade. As the blood flow towards relaxed muscles increases, the gap between the temperatures decreases. This produces the sensation of "warming." It may feel like the immersing of one's hands into hot water or a feather bed. Some patients report that their hands feel like "little suns" or like a "fire-place radiating heat." Also there is evidence of sensations similar to the "squeezing tenderly a small fluffy chicken". Regardless of the description of the relaxation sensation, it is definitely pleasant, and this is characteristic for all other sensation-indicators

of relaxation. The patients who are skeptical might be invited to measure the temperature. In fact, it is always higher on relaxation.

PRICKING is also quite often an initial sensation of beginners learning to relax. It is important to say, that unlike the sensation of warmth, pricking occurs only during the initial stages of relaxation when the muscles are still rather tense. This pricking disappears as soon as the patient learns to relax better and the quality of relaxation improves. Thus, it is suggested to overcome this initial sensation and in order to develop the ability to relax effectively, the trainee should concentrate on other more important sensations.

HEAVINESS, like heat, is a reliable sign of relaxation and is quite frequent in the first half of training. This sensation can be attributed, as well as the raise of temperature, to the redistribution of blood. The blood that fills the dilated vessels is not only hot but it is also heavy, and the sensation is experienced as heaviness.

As one goes deeper into relaxation, the sensation of heaviness gets transformed into an opposed sensation of LIGHTNESS or WEIGHTLESSNESS. This happens when the muscle receptors are “switched off” and cannot perceive weight. The sensation of heaviness, as well as that of lightness, is a good indicator of relaxation. Both indicators are accompanied by the sensation of heat, and a stable, often increasing sensation of heat, characterizes the process of transforming from “heaviness” into “lightness.”

PULSATION is another important sensation that indicates the process of relaxation. This sensation appears as a response to a drop in the level of muscle tension, which makes the receptors able to perceive those weak movements, which are generated by vessel pulsation caused by heart beats.

Thus, four of the five defined sensations – heat, heaviness, lightness and pulsations – are reliable indicators of relaxation. Their quality and intensity helps to evaluate to what extent a person has relaxed.

In the beginning stages the signs of relaxation are sensations of warmth, heaviness and pulsations; advanced stages are limited to sensations of warmth and lightness. It is essential to feel at least one of the four sensations, and it is not necessary to feel all of them.

Sometimes it happens that the sensation is somewhat different and rare. One individual has describes it like a “soft swelling”; another speaks about sensations of “light softness.” It is important to say that any sensation one feels due to muscle relaxation techniques will be comfortable and pleasant.

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## **DEALING WITH TECHNO-STRESS WHEN KEEPING UP CAN BRING YOU DOWN**

**Betty C. Carlson, Ed.D.**  
Chaminade University of Honolulu

A recent editorial by a nationally known newspaper columnist described the feeling of overwhelm upon returning from a weekend of being “unplugged” to 554 “new, unread” e-mail messages. A colleague at an East Coast university described her experience of coming in on a Monday morning to 110 communications, since the previous Friday, from students and other faculty via e-mail, voice mail, fax, and snail mail. An instructor who uses distance learning technology to teach mathematics to graduate students reports reading and responding to no less than 300 e-mails per week, just to clarify assignments and answer questions. Business owners and operators talk about “the need for speed” in keeping up with orders, requests and complaints; failure to act and react quickly could mean lost business, customer dissatisfaction, and decreasing market share.

There is no question that technology has made an enormous impact on the way we live, work, shop, and play. Telecommuting has opened up employment opportunities for full and part-time workers, while saving business overhead expenses. We can order our groceries on-line and have them delivered at a time convenient for us; we can research our family history in records close to home and around the world; many high schools and universities routinely offer courses on-line to accommodate students and increase enrollments; and on-line

shopping was predicted to generate close to 39 billion dollars in the past holiday season. For most of us the benefits provided through on-line technology are enormous - access to people, information, goods and services, and opportunities that up until now were simply not available. On-line shopping is particularly appealing: no waiting in lines, no store hours to work around, no crowds, and no uninformed or rude clerks who aren't particularly interested in helping us anyway. Clearly, convenience and speed are two significant benefits made possible by the use of on-line technology in our work and personal lives.

The number of techno-savvy consumers is growing; more and more of us have one or more e-mail accounts, and multiple telephone/fax numbers. We have computers and fax machines at home, at work, in our briefcases, and in our cars. We can communicate with more people more often and because we can, we do. The very nature of e-mail and fax communication implies an urgency which seems to demand a response sooner rather than later. This trend can lead to "techno-stress" - a stress reaction to the demand characteristics of technological communication between and among people. Because reciprocity is an understood and socially desirable component of most human communication, to "ignore" (or worse, delete!) e-mails, faxes, or the like simply because of sheer numbers can lead to professional and personal stress. What we don't seem to know how to cope with is the reality of "sensory overload". No single human being can reasonably deal with hundreds of daily messages, week after week. Trying to cope with every communication that crosses your computer screen - just because it is there - is reactive rather than proactive. For many of us, the need to respond quickly can get in the way of responding appropriately. Perhaps some messages don't really need to be responded to at all - but because we can, we often do, setting into motion yet another chain of emails we'll have to read later!!

What can we do, as busy but responsible communicators, to minimize "techno-stress" for ourselves and for the people we interact with? Aside from NOT giving out your e-mail to anyone you know (which seems to defeat the purpose of the whole enterprise) or completely ignoring ALL communications you do receive (which also seems rather counterproductive), what techniques do YOU use to cut down on your own "techno-stress"? What works for you? What tips would you like to share with the readership? Contributions will be highlighted in the Fall 2001 *ISMA-USA NEWSLETTER*. **Send your ideas, stories, and strategies to Betty Carlson at: [bcarlson@chaminade.edu](mailto:bcarlson@chaminade.edu).**

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## THE JOB STRESS EPIDEMIC

**[Paul J. Rosch, M.D., F.A.C.P.](#)**

Chairperson, ISMA-USA  
President, The American Institute of Stress  
Clinical Professor of Medicine and Psychiatry  
New York Medical College

*Time* magazine referred to stress as "America's #1 Health Problem" in its June 6, 1983 cover story, and there is little doubt that things have gone steadily downhill since then. Numerous surveys show that job pressures are far and away the largest source of stress for American adults. They also confirm that this problem has increased progressively over the past few decades and recent developments suggest that it will continue to escalate. Announced and projected layoffs due to closings, downsizing and mergers suggest that fears of unemployment will soar. In addition to job insecurity, widespread violence in the workplace, increased rudeness on the part of co-workers and clients, more time and costs for commuting, techno-stress, the persistence of discrimination because of race, religion or gender, constant and unreasonable deadlines and other time pressures have also contributed to the current job stress crisis.

Estimates of the prevalence and severity of job stress vary with different polls depending upon the demographics of the targeted group, whether the survey is based on self-report, a questionnaire, personal or

telephone interview, what questions were asked and in what setting, the confidentiality of responses, size of the sample, and most importantly, who is conducting the survey and for what reason. These all need to be considered when evaluating results and explains why conclusions can vary so much for different reports. Some commonly cited examples include:

- 40 % of workers report their job is "very or extremely stressful."
- One-fourth of employees view their jobs as the number one stressor in their lives.  
*-Northwestern National Life*
- Problems at work are more strongly associated with health complaints than are any other life stressor - more so than even financial or family problems.  
*-St. Paul Fire and Marine Insurance Co.*
- Three-fourths of employees believe workers have more on-the-job stress than a generation ago.  
*-Princeton Survey Research Associates*
- 26% of employees report they are "often or very often burned out or stressed by their work."  
*-Families and Work Institute*
- 29% of workers complain that they are "quite a bit or extremely stressed at work."  
*-Yale University Survey*

A 1999 NIOSH and NIH Conference reported that:

- Americans have been working harder and longer for the past two decades to maintain the same standard of living.
- The number of hours worked increased 8% in one generation and now averages 47 hrs. /week and 49 hrs. /week for one in five employees.
- More jobs were lost in the previous year than any other year in the past decade.
- Over this period, the number of workers fearful of job loss has doubled.

That was two years ago and the problem has worsened considerably since then. A CBS survey in February found that almost 50 percent of employees polled were concerned about retaining their job.

The last Labor Day Gallup Poll on *Attitudes in the American Workplace* found that:

- 80% of workers feel stress on the job.
- Nearly half say they need help in managing stress.
- 42% say their coworkers need such help.
- 14% of respondents had felt like striking a coworker in the past year, but didn't.
- 25% have felt like screaming or shouting because of job stress.
- 10% are concerned about an individual at work they fear could become violent.
- 9% are aware of an assault or violent act in their workplace in the last year.
- 18% have experienced some sort of threat or verbal intimidation in the last year.

The November 2000 Integra Realty Resources Survey similarly found that:

- 65% of workers said that workplace stress had caused difficulties.
- More than 10 percent described these as having "major" effects.
- One in 10 Americans say they work in an atmosphere where physical violence has occurred because of job stress.
- 42% of this group reported that yelling and other verbal abuse is common.
- 29% admit to yelling at co-workers because of workplace stress.
- 2% admitted that they had actually personally struck someone.
- Nearly one in four have been driven to tears because of workplace stress.
- 14% said they work where machinery or equipment has been damaged because of workplace rage.
- 19% or almost one in five had quit a previous position because of job stress.
- 62% routinely find that they end the day with work-related neck pain.
- 44% reported stressed-out eyes.

- 38% complained of hurting hands.
- 34% reported difficulty in sleeping because they were too stressed-out.
- Over half say they spend 12-hour days on work related duties.
- Half of all workers often skip lunch because of job demands.
- 12% had called in sick because of workplace stress, and this is a growing problem.

According to the 1999 CCH Unscheduled Absence Survey (over 300 companies with 800,000 workers), the number of employees who call in sick due to stress had tripled over the last four years. The European Agency for Safety and Health at Work Conference June 15-20, 2000 reported that over half of the 550 million working days lost each year in the United States due to absenteeism are stress related. Stress currently accounts for one out of five of all last-minute no-shows. Such absences are estimated to cost employers \$602.00/worker/year and could cost large companies as much as \$3.4 million annually.

That's just the tip of the iceberg. Job stress is estimated to cost American industry \$300 billion a year from absenteeism, employee turnover, diminished productivity, workers compensation awards and other legal expenses, direct medical and insurance costs, etc. Unemployment is at a new high that some fear signals a major recession and recently triggered several successive drops in interest rates. Fortune 500 companies are projecting more massive layoffs, and the abrupt demise of numerous dot coms and a new wave of megamergers and hostile acquisitions augurs more worker uncertainty and stress over job insecurity at all levels.

The pervasiveness and severity of job stress seems likely to worsen for these and other reasons. Tactics employers and workers can use to handle this problem will be discussed in a future article. It is important to note that the Gallup Poll found that although four out of five workers complained of job stress and almost half said they needed help in stress management, 65% reported either that their company had no such program, or if they did, they knew nothing about it.

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**SEVENTH INTERNATIONAL STRESS  
MANAGEMENT CONFERENCE**

**TAKING THE STRESS OUT OF WORK**

University of Warwick, England, July 4-6, 2001  
For program and registration information visit:  
<http://www.isma.org.uk/warwick1.htm>



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## ANNOUNCEMENTS

### VALIDATION OF THE DATO STRESS INVENTORY

[Robert Dato, Ph.D., NCPsyA](#)

Dato Leadership Institute

<http://www.dato-leadership-institute.com/>

#### INTRODUCTION

According to **The Law of Stress** (Dato, 1978, 1996b, 1997), **stress is the difference between pressure and adaptability of any kind.** In the form of an equation, **Stress = Pressure - Adaptability** or **S = P - A.** Thus, when we are measuring stress, what we are really measuring is unadaptability. Cox (1978) and others have documented many valid definitions and descriptions of stress, however, this author has chosen to use the Law of Stress as the theoretical base for the construction of the Dato Stress Inventory (Dato, 1996a) because this metaconcept serves as an elegant umbrella under which all scientifically-based definitions and descriptions can be subsumed. The DSI not only provides practitioners and researchers with an instrument to easily, quickly and accurately assess and evaluate stress, but also provides the average person with a simple, self-scoring test to measure his or her stress. This validation study will offer proof of the reliability and validity of the DSI.

#### INVENTORY DESCRIPTION

The **Dato Stress Inventory** is a stress assessment and evaluation instrument designed to monitor stress in adults 18 or older. The DSI consists of three profiles containing 50 defined items: the Personal Symptoms Profile (20 items), Personal Needs Profile (18 items), and Personal Skills Profile (12 items). Items are rated on a five-point scale.

#### DSI PROFILE ITEMS

##### PERSONAL SYMPTOMS PROFILE

1. Headaches
2. Muscle Tension
3. Fatigue
4. Overeating
5. Loss of Appetite
6. Constipation
7. Diarrhea
8. Rapid Heartbeat
9. Hypertension
10. Insomnia
11. Inattentiveness
12. Forgetfulness
13. Poor Concentration
14. Irritability
15. Restlessness
16. Hyperactivity
17. Frustration

##### PERSONAL NEEDS PROFILE

1. Nourishment
2. Activity
3. Rest
4. Protection
5. Stability
6. Control
7. Acceptance
8. Approval
9. Understanding
10. Identity
11. Purpose
12. Commitment
13. Responsibility
14. Cooperation
15. Achievement
16. Respect
17. Admiration

##### PERSONAL SKILLS PROFILE

1. Objective
2. Perceptive
3. Imaginative
4. Thorough
5. Judicious
6. Decisive
7. Dynamic
8. Persuasive
9. Flexible
10. Confident
11. Enthusiastic
12. Optimistic

- 18. Anger
- 19. Anxiety
- 20. Depression

**18. Appreciation**

**Four levels of stress** can be measured: **Mild Stress (20-39%)**, **Moderate Stress (40-59%)**, **Severe Stress (60-79%)**, and **Extreme Stress (80-100%)**. The test can be self-administered, scored, and interpreted in ten minutes. Retesting may be conducted at any time interval. The DSI is designed for use with both normal and clinical populations.

Scoring the DSI requires simple arithmetic procedures that can easily be done by hand or with a calculator. After the test is taken, each profile is scored, with raw scores being transformed into percentage scores. The DSI Score is the mean of the percentage scores of the three profiles. Interpretation of the test is divided into two types, assessment and evaluation. Assessment involves circling the three items on each profile which have been rated lowest and which indicate current need for improvement. Evaluation consists of the classification of the DSI Score into one of four stress levels and represents the current achievement of stress management. On the last page of the test, the DSI contains Strategic Stress Management Guidelines that recommend program components and Strategic Stress Assessment Guidelines that recommend optimal assessment frequency based on stress level.

**RESEARCH SUBJECTS**

Subjects consisted of 400 adults from the general population who were easy to access and who volunteered to take the test based on personal interest. These subjects lived in various communities in the southeastern region of Pennsylvania in the USA. 137 males and 263 females ranging in age from 18 to 78 years participated in the study. 71 educational levels ranged from grade school to postgraduate, with a wide variety of occupational fields represented. About 95% of the subjects were Caucasian, with about 5% being Hispanic, African-American, and Asian. Comparison of mean scores of subjects in six 10-year age ranges yielded only a 3% scoring difference between ranges. The gender difference was also 3%, with females scoring higher. Neither of these results is statistically significant. Educational, occupational, and ethnicity differences were not statistically compared, however, based on the observations of this researcher, differences with these variables are just as small as with the age and gender variables. The homogeneity of results regarding key variables makes the use of norm groups unnecessary.

**INTERNAL CONSISTENCY**

Results indicate high internal consistency, with each profile correlating significantly with the other two profiles and the test as a whole using the standard  $p = .05$  criterion, with the Spearman rank correlation coefficient as the measure (Siegel, 1956). With a random sample of twenty-five subjects, all results were significant at  $p < .05$ .

<b>SYMPTOMS</b>	<b>NEEDS</b>	<b>SKILLS</b>	<b>DSI</b>
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<b>SYMPTOMS</b>	----	<b>.523 (p &lt; .005)</b>	<b>.464 (p &lt; .025)</b>	<b>.744 (p &lt; .001)</b>
<b>NEEDS</b>	----	----	<b>.744 (p &lt; .001)</b>	<b>.922 (p &lt; .001)</b>
<b>SKILLS</b>	----	----	----	<b>.851 (p &lt; .001)</b>

### TEST-RETEST RELIABILITY

Test-retest reliability with this same group of subjects resulted in a Spearman rho of **.943 (p < .001)**. Stress is a highly sensitive variable that measuring test-retest reliability at longer intervals would have been futile. Subjects who have been required to remain in relative isolation in order to prevent external pressures from impinging upon them. This was a field study, which allowed for little control of the testing environment. Personal and clinical observations and repeated administrations of the DSI revealed that stress scores for both clinical and non-clinical subjects vary less than 5% from week to week, and rarely move to another level without a significant event occurring.

### SCORING DISTRIBUTION

The scoring distribution of the entire sample of 400 subjects was essentially a Normal Distribution, but negatively skewed and truncated at 20%. A random sample of 100 subjects yielded a **Mean = 47.85%** and a **Standard Deviation = 10.55%**. The approximate percentages for the entire sample at the four stress levels were: **Mild Stress (20%), Moderate Stress (70%), Severe Stress (10%), and Extreme Stress (0%)**. The skew is the result of the sample of volunteer subjects, who preconsciously attempted to “look good” by underestimating responses, since many of the subjects knew the researcher and/or his assistants. With a truly random sample, it is expected that subjects would still have tried to deny some aspects of stress, if just because of their own self-image. It is not surprising that very few subjects scored in the Extreme Stress range. A score in this range would indicate that a subject was currently or recently under extreme internal or external pressure. Internal pressure might include such medical conditions as very acute or chronic medical or psychological conditions, whereas external pressures might include a recent event, such as a car accident, a robbery, or a death in the family. One would almost always expect to see a significant portion of the population experiencing Extreme Stress in the aftermath of a natural catastrophe, such as a tornado, hurricane, or earthquake. Extreme Stress which does not subside within a reasonable period with treatment, or which recurs, may be indicative of Post-Traumatic Stress Disorder.

### CONCURRENT VALIDITY

Derogatis and Coons (1993) provide us with an excellent review of many stimulus-oriented, response-oriented, and interaction-oriented measures of stress in their book chapter, “Self-Report Measures of Stress.” The majority of these tests are useful for specific populations; however, this researcher decided that the validation of the DSI should be undertaken using only well-established instruments that are applicable to the population at large. Three tests were chosen: the State-Trait Anxiety Inventory (Spielberger, 1983a, 1983b), the Self-Rating Depression Scale (Zung, 1965, 1967; Zung, Richards, and Short, 1965), and the Self-Rating Anxiety Scale (Zung, 1971, 1980). These are not strictly stress tests, but they are elegant and superior instruments that have been used for many decades in many settings and they are easy to administer, score, and interpret. Furthermore, the literature consistently reports that depression and anxiety are seen by scientists and the general population as primary manifestations of stress.

Subjects were administered the DSI, followed by the **Self-Rating Depression Scale (SDS), Self-Rating Anxiety Scale (SAS), and the State-Trait Anxiety Inventory (STAI)**. Two sub-batteries, each consisting of a measure of anxiety and depression, were created from the full battery of tests. Each sub-battery used a different measure of anxiety, but the same measure of depression. Stress Assessment Battery 1 (SAB 1) consisted of the STAI and the SDS and Stress Assessment Battery 2 (SAB 2) consisted of the SAS and the SDS. Two separate samples of subjects were studied: N = 25 for SAB 1 and N = 15 for SAB 2.

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SAMPLE ONE			SAMPLE TWO		
DSI X STAI	.752	p < .001	DSI X SAS	.516	p < .050
DSI X SDS	.873	p < .001	DSI X SDS	.644	p < .050
DSI X SAB 1	.834	p < .001	DSI X SAB 2	.698	p < .005

Additionally, two single case studies with normal subjects were conducted on a weekly basis over a period of six months to confirm the high concurrent validity found in the group studies. Both subjects were administered the DSI and SAB 1, with the resulting Spearman rho correlations of **.969, p < .001** for one subject and **.750, p < .001** for the other. Their mean correlation was **.859, p < .001**. This compares favorably with the mean correlation of the two samples, **.766, p < .001**. It would appear that the validity increases with repetitive use of the instrument.

## CLINICAL STUDIES

Clinical case studies were undertaken over a period of one year at an outpatient mental health facility in southeastern Pennsylvania, the same region in which the research subjects were tested. All clients during that year completed the DSI at the beginning of each of their one-hour sessions. Session frequency ranged from several sessions per week to one session per month. The mean DSI for incoming clients was 66% (Severe Stress), whereas the mean DSI for clients who terminated or who were continuing on a maintenance basis was 34% (Mild Stress). Within this group was a client with a severe Borderline Personality Disorder. At his first session his DSI = 84% and his SDS = 75%. After 56 hours of therapy, his DSI score dropped to 37% and his SDS score dropped to 45%. Another client diagnosed with Major Depression had an initial DSI score of 63%, with an SDS score of 75%, and an STAI score of 74%. After 33 hour of therapy, his scores were reduced to DSI = 27%, SDS = 29%, and STAI = 30%. A third client with an Adjustment Disorder who had recently relocated from another state and had changed careers dropped from a DSI score of 60% to 22% in only 11 sessions. These results are representative of most of the clients tested. The stress of all clients diminished over time. From this study, it can be concluded that the DSI, SDS, and STAI all proportionally measure the stress reduction expected from intervention.

Since stress is a common phenomenon among medical patients, this researcher collected stress data on a number of individuals with various types of medical conditions. These patients were all receiving medical care, but not psychological treatment. A female patient physically attacked on the job was diagnosed with Myofascial Pain Syndrome. Shortly after the attack her DSI score was 82%, after five weeks her score was 53%, after one year on disability leave, her score was 50%, and eight months after returning to work, her score went down to 40%. A male patient suffered a stroke and seizure and was rated by his wife at 80% at the time of the stroke. Fifteen weeks after the stroke, the patient rated himself at 23%. During the same period, his wife's DSI dropped from 50% to 23%. Four sisters ranging in age from 67 to 75, and each with a history of breast cancer, were tested with the DSI in 1992. Sister M's score was 39%, Sister's A's score was 58%, Sister L's score was 62%, and Sister R's score was 69%. Fourteen months later, Sister M, previously treated for cancer, remained cancer-free. Sister A is undergoing treatment for newly diagnosed cancer. Sister L had breast cancer and is in the terminal stage of lymphatic cancer. Sister R had breast cancer and recently died of breast cancer. Nine years after the original testing of these women, only Sister M, with a moderate stress score of 39% is alive. Sister R (DSI = 69%) died first, followed by Sister L (DSI = 62%), then Sister A (DSI = 58%). In this case study, there is a +1.00 correlation between severity of stress and mortality. These medical case studies confirm the utility of the DSI as a measure of stress associated with medical conditions under treatment, but without psychological intervention.

## CONCLUSIONS

It has been suggested by Laing (1988) that self-report instruments should be evaluated according to the

following four criteria: (1) The respondent must clearly understand what information is being requested. (2) The information requested must be available to the respondent. (3) The respondent must be willing to provide the information. (4) The examiners must be able to interpret the response accurately. The Dato Stress Inventory meets or exceeds each of these criteria. Thus it appears that the DSI is a viable instrument for assessing and evaluating stress.

The result of the reliability and validity studies that were performed on the DSI data indicate very high correlations, every one of which is statistically significant, with room to spare. This researcher is convinced that necessary and sufficient validation has been achieved and believes that future research studies should be focused on using this instrument to monitor stress in field studies and controlled research projects.

This author has made the DSI available to professionals and the public at no cost, regardless of the purpose of its use. This author will allow the test to be reproduced and used without limit, so long as it is not adapted, distributed, or sold. To date, more than eight hundred professionals from around the world have requested sample copies of the Dato Stress Inventory. Most of these professionals are in the mental health field, however, there has also been much interest from professionals in the fields of education, medicine, nursing, government, and business. These professionals report using the test primarily for assessment and evaluation purposes and secondarily for teaching and research. It is hoped that the availability of the Dato Stress Inventory promotes stress research activities and stimulates curious and dedicated people to monitor their stress more frequently and to use the results to guide their own stress management efforts.

## REFERENCES

- Cox, T. (1978). *Stress*. Chapter One: The Nature of Stress. Baltimore: University Park Press.
- Dato, R. A. (1978). *The Law of Stress*. Wynnewood: DLI Publications.
- Dato, R. A. (1996a). *The Dato Stress Inventory. Sixth Edition*. Wynnewood: DLI Publications.
- Dato, R. A. (1996b). Letters to the editor: The Law of Stress. *International Journal of Stress Management, Vol.3, No.3*,181-182.
- Dato, R. A. (1997). Comments on Dato's "Law of Stress." Replies to Morgan and Compennolle. *International Journal of Stress Management, Vol. 4, No.1*, 75-76.
- Derogatis, L. R. and Coon, H. L. (1993). Self-Report Measures of Stress. In L. Goldberger and S.Breznitz (Eds.), *Handbook of Stress, Second Edition*, (pp. 200-233). New York: The Free Press.
- Laing, J. (1988). Self-report: Can it be of value as an assessment technique? *Journal of Counseling and Development, Vol.67, September*, 60-61.
- Siegel, S.(1956). *Nonparametric Statistics for the Behavioral Sciences*. New York: McGraw-Hill.
- Spielberger, C. D. (1983a). Manual for the State-Trait Anxiety Inventory. Palo Alto: Consulting Psychologists Press.
- Spielberger, C. D. (1983b). State-Trait Anxiety Inventory: A Comprehensive Bibliography. Palo Alto: Consulting Psychologists Press.
- Zung, W. W. K.(1965). A self-rating depression scale. *Archives of General Psychiatry, Vol. 12*, 63-70.
- Zung, W.W.K.(1967). Factors influencing the Self-Rating Depression Scale. *Archives of General Psychiatry, Vol. 16*, 543-547.
- Zung, W. W. K. (1971). A rating instrument for anxiety disorders. *Psychosomatics, Vol. 12*, 371-379.
- Zung, W.W.K. (1980). Assessment scales and techniques. In I. L. Kutash, L. B. Slesinger, and Associates. Jossey-Bass: San Francisco.

Zung, W. W. K., Richards, C. B., and Short, M. J. (1965). Self-Rating Depression Scale in an outpatient clinic. *Archives of General Psychiatry, Vol. 13, 508-515.*

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Paul J. Rosch  
Chair, ISMA-USA  
124 Park Ave.  
Yonkers, NY 10703  
E-mail: [stress124@earthlink.net](mailto:stress124@earthlink.net)

**ISMA-USA Newsletter Editorial Information**

**Editor:**

Serena Wadhwa

**Assistant Editor:**

Betty J. McGuigan

**Contributors:**

Betty C. Carlson

Robert A. Dato

James C. Quick

Oleg Radyuk

Paul J. Rosch

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Please send your contributions to:

Serena Wadhwa

[bserenwad@aol.com](mailto:bserenwad@aol.com)

or

Betty J. McGuigan

[ISMAusaBJM@aol.com](mailto:ISMAusaBJM@aol.com)

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